(No Model.)

## J. H. STRINGER. WIRE FENCE MAKING MACHINE.

No. 422,262.

Patented Feb. 25, 1890.

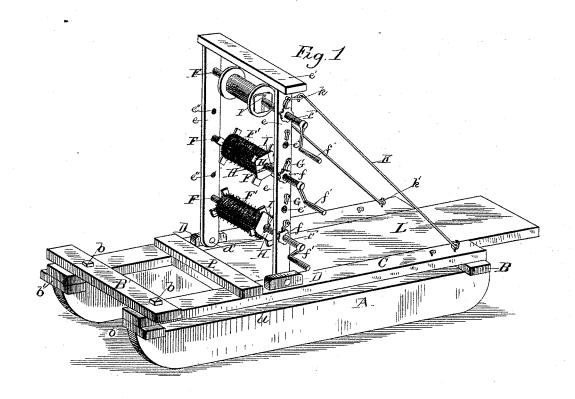


Fig. 2

Fig. 3

Fig.4.

Witnesses I, R. Cornwalls L. S. Bucor John H. Stringer By his attorney M. V. Tierney.

## UNITED STATES PATENT OFFICE.

JOHN H. STRINGER, OF HUMPHREYS, MISSOURI.

## WIRE-FENCE-MAKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 422,262, dated February 25, 1890.

Application filed November 11, 1889. Serial No. 329,920. (No model.)

To all whom it may concern:

Be it known that I, John H. Stringer, a citizen of the United States, residing at Humphreys, in the county of Sullivan and State of Missouri, have invented certain new and useful Improvements in Wire-Fence-Making Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled to in the art to which it appertains to make and

My invention relates to an improved combined machine for constructing and removing wire fences; and it consists in the combination and arrangement of parts hereinafter described and claimed.

The object of my invention is to provide a simple, strong, and easily - handled machine for stretching and winding wire for fences, 20 and also to be used as a post puller or extractor. I attain this object by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, 25 and in which-

Figure 1 is a perspective view of my improved machine. Fig. 2 is a detail view of the spool-clamping plate. Figs. 3 and 4 are

modified forms of the same. In the drawings, A represents the runners, united at one end by a stationary cross-piece B and by a movable cross-piece B' at the other end, held in place by bolts having nuts b on their upper ends, permitting the removal of the cross-piece for purposes hereinafter stated. On the top of the runners and the cross-piece B and stationary blocks b', on the runners at their opposite ends, are secured side bars or supports C, on the upper face of 40 which are rigidly secured at about their longitudinal centers bearing-blocks D, having lateral openings or bearings d therein, in which are journaled shafts d'. On the inner projecting ends of the shafts d' is mounted 45 the reel-frame, consisting of two parallel posts e, united at their upper ends by a cross-piece e'. The lower edges of the posts are rounded to permit the frame to be lowered either toward the front or toward the rear of the ma-50 chine. A series of openings e<sup>3</sup> are made in the posts e at intervals, in which are placed I the cross-piece B' and placing the bottom in

the removable cylindrical shafts F, extending across the frame. On one end of these shafts, preferably three in number, are rigidly keyed ratchet-wheels f. Pawls G are placed on the 55 frame-post adjacent to the ratchet-wheels,

with which they engage.
On the shafts F are placed spools or bobbins F' for wire or rope, as the case may be, they being held firmly on the shaft and pre- 60 vented from moving independently by clamping-plates H, which, as shown in Fig. 2, are composed of metallic plates with sharp corners h, bent in at right angles and inserted into the heads of the spools. At the center 65 of each of these plates is formed a groove h', in which the edge of the locking-key I fits when inserted in its seat formed in the shaft, thus preventing the plates and consequently the spools from moving independently of the 7° shaft. The opposite ends of the shafts are provided with suitable nuts (not shown) to prevent the shafts from becoming displaced. By removing the keys and nuts the shafts can be readily withdrawn and placed in other 75 bearings, according to the height of the fence or spacing desired.

K represents two brace-rods having hooked ends fitting in eyes k and k' on the upper ends of the posts and outer ends of the side 80 bars C, respectively, the rods retaining the frame in its vertical position and bracing it against the strain of the wires.

A duplicate pair of eyes is placed on the side bars to the rear of the others, so that the 85 frame may be tilted forward and held in that position.

L represents a sliding bottom placed between the side bars, one end resting on the cross-piece B and the other suppported by the 90 bar L', secured to its upper face, its ends projecting out and resting on the side bars, thereby forming a substantial platform for the operator, admitting of removal when it is desired to remove posts. The blocks b' being 95 short and not extending across the space between the runners, the posts can pass between the same when the bar B' is removed.

By this construction the machine may be

used as a wire stretcher or gatherer in build- 100 ing or taking down a fence, and by removing

the position shown the posts of the fence are brought beneath the frame and by a suitable chain or rope secured thereto and on the upper spool can be readily extracted. By inclining the frame the upper spool can be brought directly over the posts.

In Fig. 3 the clamping-plate has a central collar having grooves in which the key fits, and in Fig. 4 the plate is replaced by a series of arms extending out from the collar.

I am aware that many minor changes in the construction and arrangement of the parts of my machine can be made without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

The combination, with the runners, of a removable cross-piece set at one end thereof, a 20 stationary cross-piece at the other end, a sliding bottom, a frame pivoted on the runners and held in place by adjustable brace-rods, and a series of spool-bearing shafts in the frame, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. STRINGER.

Witnesses:
Thos. J. Stringer,
William S. Musgrave.